

Virginia

Science and Engineering Profile

	STATE	U.S.	Rank		STATE	U.S.	Rank
Doctoral scientists, 1995	13,682	453,928	10	Total R&D performance, 1995 (millions)	\$3,897	\$177,210	14
Doctoral engineers, 1995	2,901	86,738	10	Industry R&D, 1995 (millions)	\$1,577	\$130,332	19
S&E doctorates awarded, 1996	634	27,230	14	Academic R&D, 1996 (millions)	\$448	\$22,481	16
of which, in engineering	25%	23%		of which, in life sciences	52%	56%	
in life sciences	19%	25%		in engineering	17%	16%	
in psychology	16%	13%		in environmental sciences	13%	6%	
S&E postdoctorates, 1996	628	37,019	17	Higher education current-fund expenditures, 1995 (millions)	\$4,289	\$182,602	12
in doctorate-granting institutions							
S&E graduate students, 1996	12,706	430,631	10	Number of SBIR awards, 1990-1997	1,692	31,155	3
in doctorate-granting institutions				Patents issued to state residents, 1997	818	61,699	21
Population, 1997 (000s)	6,734	271,464	12	Gross state product, 1996 (billions)	\$197.8	\$7,677.4	13
Civilian labor force, 1997 (000s)	3,405	137,564	12	of which, agriculture	1%	2%	
Personal income per capita, 1997	\$26,438	\$25,598	15	manufacturing, mining, construction	20%	23%	
Federal spending				transportation, communication, utilities	9%	8%	
Total expenditures, 1997 (millions)	\$52,908	\$1,405,060	6	wholesale and retail trade	14%	16%	
R&D obligations, 1996 (millions)	\$4,602	\$66,087	3	finance, insurance, real estate	18%	19%	
				services	20%	20%	
				government	19%	12%	

Rankings and totals are based on data for the 50 states, D.C., and Puerto Rico.

Data on S&E postdoctorates and S&E graduate students include health fields.

Federal Obligations for Research and Development by Agency and Performer: Fiscal Year 1996

[Thousands of Dollars]

	Total	Federal Intramural	All FFRDCs	Industrial firms	Universities & Colleges	Other nonprofits	State & local government	State rank
Total, all agencies	4,601,548	1,580,204	237,256	2,536,729	209,552	35,275	2,532	3
Department of Agriculture	9,637	817	0	0	7,927	893	0	37
Department of Commerce	18,738	9,642	0	6,385	1,894	675	142	14
Department of Defense	3,667,942	1,245,948	172,153	2,216,873	32,307	661	0	3
Department of Energy	87,582	11,960	58,890	5,600	8,693	2,439	0	14
Dept. of Health & Human Services	148,011	840	0	31,249	105,008	9,748	1,166	20
Department of Interior	41,056	40,070	0	199	734	53	0	3
Department of Transportation	36,983	3,054	5,958	25,245	1,195	350	1,181	4
Environmental Protection Agency	23,729	0	0	22,470	648	611	0	4
Nat'l Aeronautics & Space Admin.	508,704	265,539	0	215,642	16,144	11,336	43	6
National Science Foundation	59,166	2,334	255	13,066	35,002	8,509	0	13
State rank	3	3	6	3	18	16	21	

Federal R&D obligations are as reported by funding agencies.

FFRDC = federally funded research and development center

SBIR = small business innovation research

na = not applicable